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EXAMINER	
SMITH, JOSHUA Y	
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2477	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/727,726	KUURE ET AL.	
	Examiner	Art Unit	
	JOSHUA SMITH	2477	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 August 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-10,12-22,24-28 and 30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,8-10,12-20,22 and 24-28* is/are rejected.

7)☒ Claim(s) *7,21 and 30* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The amendment filed 08/27/2010 has been entered.

- **Claims 1-5, 7-10, 12-22, 24-28 and 30 are pending.**
- **Claims 6, 11, 23 and 29 are cancelled.**
- **Claims 1-5, 8-10, 12-20, 22 and 24-28 stand rejected.**
- **Claims 7, 21, and 30 are objected to.**

Claim Objections

Claim 24 is objected to because of the following: Claim 24 recites: "A computer readable memory encoded with a computer program **executable** to perform actions" (emphasis added by the examiner). Although the claim recites a "computer program executable", it does not recite ***by what*** the computer program is executable. The examiner suggests including ***by a processor*** in Claim 24, so that Claim 24 includes ***a computer program executable by a processor to perform actions***. Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 8, 9, 12, 15-18, 22, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorenbosch (Pub. No.: US 2004/0203793 A1) in view of Kuita (Pub. No.: US 2003/0139171 A1), hereafter respectively referred to as Dorenbosch and Kuita.

In regard to Claim 1, Dorenbosch teaches in paragraphs [0023], [0024], [0028] and [0029], and in FIGS 1 and 3, when a remote unit initially presses a push-to-talk button, a PTT_on message is sent to a serving base station, causing a set of resources to be allocated, and when the remote unit releases the push-to-talk button, the remote unit sends a PTT_off indication to the base station the resources remain dedicated to the remote unit for some period of time (hang time, e.g., 12 seconds), and during the time when the user is not depressing the push-to-talk button, the base station transceiver subsystems send idle frames to preserve the link power control, and when the remote unit user subsequently depresses the push-to-talk button, the link is completely established and immediately responsive, and a hang timer is used to detect the end of a call, and when no remote user depresses the push-to talk button before the hang timer expires, the infrastructure considers the call terminated, and releases the

resources, and during the time when a user is not depressing a push-to-talk button, base station transceiver subsystems send idle frames to preserve the link power control, and at time t_1 User 1 (FIG. 3) ceases talking, and at time t_2, User 2 (FIG. 3) begins talking (communicating in a cellular communications network through a dedicated channel comprising both an uplink and a plurality of downlinks; controlling a flow of data packets by a server function in a core network; and keeping up the dedicated channel after a last speech sample packet is sent downlink from the core network by sending post-speech packets for a time of such duration that a new uplink can be established utilizing a downlink from the core network, wherein the server function in the core network transmits the post-speech packets to the plurality of downlinks responsive to a packet indicating an end of speech samples from the uplink, and wherein post-speech packets are also sent to a terminal that used the uplink).

Dorenbosch fails to teach a post-speech packet includes information intended for a user of a receiving terminal.

Kuita teaches in the abstract, and in paragraphs [0044] and [0047], and in FIGS. 1-3, 4A and 4B, both a bearer's directory number and mail address are automatically transmitted to an other party during a pause period, and FIG. 3 is an illustration of a personal data sequence, and a voice data sequence is located in a traffic channel (TCH) field during talking, and if a pause period is detected by a voice detector 15 (FIG. 1), no voice data sequence is present as the transmission data sequence so as to be located in the traffic channel (TCH) field (FIGS. 4A and 4B), and under the circumstances, the transmission data selection unit 25 (FIG. 2) of the controller 13 is

operated by the processing unit 26 to arrange the personal data sequence (FIG. 3) in the form of a fast associated control channel (FACCH) field (FIGS. 4A and 4B) of 112 bits, and this shows the traffic channel (TCH) field of 112 bits is replaced by the FACCH field (a post-speech packet includes information intended for a user of a receiving terminal).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Kuita in the teachings of Dorenbosch since Kuita provides a system where personal data can be shared among handsets during pauses in speech, which can be introduced into the system of Dorenbosch to allow the sharing of contact information over a voice channel that does not congest or interfere with the operation of the voice channel and does not require the use of an additional channel.

In regard to Claim 2, Dorenbosch teaches in paragraphs [0023], [0028] and [0029], and in FIGS 1 and 3, during the time when a user is not depressing a push-to-talk button, base station transceiver subsystems send idle frames to preserve the link power control, and at time t_1 User 1 (FIG. 3) ceases talking, and at time t_2, User 2 (FIG. 3) begins talking (a server function determining when a last speech sample packet is sent; the server function sending at least one post-speech packet downlink to receiving terminals; and determining whether a terminal taking part in the a session needs a new uplink; and establishing said new uplink).

In regard to Claim 8, Dorenbosch teaches in paragraphs [0023], [0024], [0028] and [0029], and in FIGS 1 and 3, when a remote unit initially presses a push-to-talk button, a PTT_on message is sent to a serving base station, causing a set of resources to be allocated, and when the remote unit releases the push-to-talk button, the remote unit sends a PTT_off indication to the base station the resources remain dedicated to the remote unit for some period of time (hang time, e.g., 12 seconds), and during the time when the user is not depressing the push-to-talk button, the base station transceiver subsystems send idle frames to preserve the link power control, and when the remote unit user subsequently depresses the push-to-talk button, the link is completely established and immediately responsive, and a hang timer is used to detect the end of a call, and when no remote user depresses the push-to talk button before the hang timer expires, the infrastructure considers the call terminated, and releases the resources, and during the time when a user is not depressing a push-to-talk button, base station transceiver subsystems send idle frames to preserve the link power control, and at time t_1 User 1 (FIG. 3) ceases talking, and at time t_2, User 2 (FIG. 3) begins talking (a control unit; and a memory including software, where the memory and the software are configured, with the control unit, to cause the apparatus at least to: receive a last speech sample packet from an uplink in a cellular communications network; and prolong an existence of downlinks by sending post-speech packets to a plurality of downlinks for a time of such duration that at least one new uplink can be established from a receiving terminal, wherein the post-speech packets are sent to the plurality of downlinks responsive to a packet indicating an end of speech sample from

the uplink, connected to the apparatus, and wherein post-speech packets are also sent to a terminal that used the uplink).

Dorenbosch fails to teach a post-speech packet includes information intended for a user of one terminal.

Kuita teaches in the abstract, and in paragraphs [0044] and [0047], and in FIGS. 1-3, 4A and 4B, both a bearer's directory number and mail address are automatically transmitted to an other party during a pause period, and FIG. 3 is an illustration of a personal data sequence, and a voice data sequence is located in a traffic channel (TCH) field during talking, and if a pause period is detected by a voice detector 15 (FIG. 1), no voice data sequence is present as the transmission data sequence so as to be located in the traffic channel (TCH) field (FIGS. 4A and 4B), and under the circumstances, the transmission data selection unit 25 (FIG. 2) of the controller 13 is operated by the processing unit 26 to arrange the personal data sequence (FIG. 3) in the form of a fast associated control channel (FACCH) field (FIGS. 4A and 4B) of 112 bits, and this shows the traffic channel (TCH) field of 112 bits is replaced by the FACCH field (a post-speech packet includes information intended for a user of one terminal).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Kuita in the teachings of Dorenbosch since Kuita provides a system where personal data can be shared among handsets during pauses in speech, which can be introduced into the system of Dorenbosch to allow the sharing of contact information over a voice channel that does not congest or interfere with the operation of the voice channel and does not require the use of an additional channel.

In regard to Claim 9, Dorenbosch teaches in paragraphs [0023], [0028] and [0029], and in FIGS 1 and 3, during the time when a user is not depressing a push-to-talk button, base station transceiver subsystems send idle frames to preserve the link power control, and at time t_1 User 1 (FIG. 3) ceases talking, and at time t_2, User 2 (FIG. 3) begins talking (prolong the existence of a downlink by sending post-speech packets to one terminal connected to the apparatus).

In regard to Claim 12, Dorenbosch teaches in paragraphs [0023], [0024], [0028] and [0029], and in FIGS 1 and 3, when a remote unit initially presses a push-to-talk button, a PTT_on message is sent to a serving base station, causing a set of resources to be allocated, and when the remote unit releases the push-to-talk button, the remote unit sends a PTT_off indication to the base station the resources remain dedicated to the remote unit for some period of time (hang time, e.g., 12 seconds), and during the time when the user is not depressing the push-to-talk button, the base station transceiver subsystems send idle frames to preserve the link power control, and when the remote unit user subsequently depresses the push-to-talk button, the link is completely established and immediately responsive, and a hang timer is used to detect the end of a call, and when no remote user depresses the push-to talk button before the hang timer expires, the infrastructure considers the call terminated, and releases the resources, and during the time when a user is not depressing a push-to-talk button, base station transceiver subsystems send idle frames to preserve the link power

control, and at time t_1 User 1 (FIG. 3) ceases talking, and at time t_2, User 2 (FIG. 3) begins talking (a control unit; and a memory including software, where the memory and the software are configured, with the control unit, to cause the apparatus to transmit post-speech packets on a packet data channel responsive to a packet indicating an end of speech samples, and wherein the one receiving terminal to which post speech packets are transmitted comprises a terminal on an uplink).

Dorenbosch fails to teach one post-speech packet of post-speech packets includes information intended for a user of one receiving terminal.

Kuita teaches in the abstract, and in paragraphs [0044] and [0047], and in FIGS. 1-3, 4A and 4B, both a bearer's directory number and mail address are automatically transmitted to an other party during a pause period, and FIG. 3 is an illustration of a personal data sequence, and a voice data sequence is located in a traffic channel (TCH) field during talking, and if a pause period is detected by a voice detector 15 (FIG. 1), no voice data sequence is present as the transmission data sequence so as to be located in the traffic channel (TCH) field (FIGS. 4A and 4B), and under the circumstances, the transmission data selection unit 25 (FIG. 2) of the controller 13 is operated by the processing unit 26 to arrange the personal data sequence (FIG. 3) in the form of a fast associated control channel (FACCH) field (FIGS. 4A and 4B) of 112 bits, and this shows the traffic channel (TCH) field of 112 bits is replaced by the FACCH field (one post-speech packet of post-speech packets includes information intended for a user of one receiving terminal).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Kuita in the teachings of Dorenbosch since Kuita provides a system where personal data can be shared among handsets during pauses in speech, which can be introduced into the system of Dorenbosch to allow the sharing of contact information over a voice channel that does not congest or interfere with the operation of the voice channel and does not require the use of an additional channel.

In regard to Claim 15, Dorenbosch teaches in paragraphs [0023], [0024], [0028] and [0029], and in FIGS 1 and 3, when a remote unit initially presses a push-to-talk button, a PTT_on message is sent to a serving base station, causing a set of resources to be allocated, and when the remote unit releases the push-to-talk button, the remote unit sends a PTT_off indication to the base station the resources remain dedicated to the remote unit for some period of time (hang time, e.g., 12 seconds), and during the time when the user is not depressing the push-to-talk button, the base station transceiver subsystems send idle frames to preserve the link power control, and when the remote unit user subsequently depresses the push-to-talk button, the link is completely established and immediately responsive, and a hang timer is used to detect the end of a call, and when no remote user depresses the push-to talk button before the hang timer expires, the infrastructure considers the call terminated, and releases the resources, and during the time when a user is not depressing a push-to-talk button, base station transceiver subsystems send idle frames to preserve the link power control, and at time t_1 User 1 (FIG. 3) ceases talking, and at time t_2, User 2 (FIG. 3)

begins talking (a network element; and a memory including software, where the memory and the software are configured, with the at least one network element, to maintain a dedicated channel between a sending terminal and a plurality of receiving terminals by sending, responsive to a last speech packet from the sending terminal, post speech packets to the plurality of receiving terminals for a time of such duration that a new dedicated channel can be established utilizing said earlier dedicated channel, and wherein post-speech packets are also sent to a terminal that used the uplink).

Dorenbosch fails to teach one post-speech packet of the post-speech packets includes information intended for a user of one terminal connected to the dedicated channel.

Kuita teaches in the abstract, and in paragraphs [0044] and [0047], and in FIGS. 1-3, 4A and 4B, both a bearer's directory number and mail address are automatically transmitted to an other party during a pause period, and FIG. 3 is an illustration of a personal data sequence, and a voice data sequence is located in a traffic channel (TCH) field during talking, and if a pause period is detected by a voice detector 15 (FIG. 1), no voice data sequence is present as the transmission data sequence so as to be located in the traffic channel (TCH) field (FIGS. 4A and 4B), and under the circumstances, the transmission data selection unit 25 (FIG. 2) of the controller 13 is operated by the processing unit 26 to arrange the personal data sequence (FIG. 3) in the form of a fast associated control channel (FACCH) field (FIGS. 4A and 4B) of 112 bits, and this shows the traffic channel (TCH) field of 112 bits is replaced by the FACCH

field (one post-speech packet of the post-speech packets includes information intended for a user of one terminal connected to the dedicated channel).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Kuita in the teachings of Dorenbosch since Kuita provides a system where personal data can be shared among handsets during pauses in speech, which can be introduced into the system of Dorenbosch to allow the sharing of contact information over a voice channel that does not congest or interfere with the operation of the voice channel and does not require the use of an additional channel.

In regard to Claim 16, Dorenbosch teaches in paragraphs [0023], [0028] and [0029], and in FIGS 1 and 3, during the time when a user is not depressing a push-to-talk button, base station transceiver subsystems send idle frames to preserve the link power control, and at time t_1 User 1 (FIG. 3) ceases talking, and at time t_2, User 2 (FIG. 3) begins talking (a dedicated channel in the cellular communications network is maintained by sending post-speech packets, after a last speech packet transmitted, to the one terminal connected to the dedicated channel).

In regard to Claim 17, Dorenbosch teaches in paragraphs [0023], [0028] and [0029], and in FIGS 1 and 3, during the time when a user is not depressing a push-to-talk button, base station transceiver subsystems send idle frames to preserve the link power control (a network element for sending post-speech packets is a server operating in the network).

In regard to Claim 18, Dorenbosch teaches in paragraphs [0023], [0028] and [0029], and in FIGS 1 and 3, during the time when a user is not depressing a push-to-talk button, base station transceiver subsystems send idle frames to preserve the link power control (the server sending post-speech packets is a router server).

In regard to Claim 22, Dorenbosch teaches in paragraphs [0023], [0024], [0028] and [0029], and in FIGS 1 and 3**,** when a remote unit initially presses a push-to-talk button, a PTT_on message is sent to a serving base station, causing a set of resources to be allocated, and when the remote unit releases the push-to-talk button, the remote unit sends a PTT_off indication to the base station the resources remain dedicated to the remote unit for some period of time (hang time, e.g., 12 seconds), and during the time when the user is not depressing the push-to-talk button, the base station transceiver subsystems send idle frames to preserve the link power control, and when the remote unit user subsequently depresses the push-to-talk button, the link is completely established and immediately responsive, and a hang timer is used to detect the end of a call, and when no remote user depresses the push-to talk button before the hang timer expires, the infrastructure considers the call terminated, and releases the resources, and during the time when a user is not depressing a push-to-talk button, base station transceiver subsystems send idle frames to preserve the link power control, and at time t_1 User 1 (FIG. 3) ceases talking, and at time t_2, User 2 (FIG. 3) begins talking (determining when a last speech sample packet is sent uplink and

sending one post-speech packet to a plurality of receiving terminals responsive to the last speech sample packet, wherein post-speech packets are also sent to a terminal that used the uplink, and determining whether a receiving terminal taking part in a session needs a new uplink, and establishing said uplink).

Dorenbosch fails to teach one post-speech packet includes information intended for a user of one receiving terminal of the plurality of receiving terminals.

Kuita teaches in the abstract, and in paragraphs [0044] and [0047], and in FIGS. 1-3, 4A and 4B, both a bearer's directory number and mail address are automatically transmitted to an other party during a pause period, and FIG. 3 is an illustration of a personal data sequence, and a voice data sequence is located in a traffic channel (TCH) field during talking, and if a pause period is detected by a voice detector 15 (FIG. 1), no voice data sequence is present as the transmission data sequence so as to be located in the traffic channel (TCH) field (FIGS. 4A and 4B), and under the circumstances, the transmission data selection unit 25 (FIG. 2) of the controller 13 is operated by the processing unit 26 to arrange the personal data sequence (FIG. 3) in the form of a fast associated control channel (FACCH) field (FIGS. 4A and 4B) of 112 bits, and this shows the traffic channel (TCH) field of 112 bits is replaced by the FACCH field (one post-speech packet includes information intended for a user of one receiving terminal of the plurality of receiving terminals).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Kuita in the teachings of Dorenbosch since Kuita provides a system where personal data can be shared among handsets during pauses

in speech, which can be introduced into the system of Dorenbosch to allow the sharing of contact information over a voice channel that does not congest or interfere with the operation of the voice channel and does not require the use of an additional channel.

In regard to Claim 24, Dorenbosch teaches in paragraphs [0023], [0024], [0028] and [0029], and in FIGS 1 and 3, when a remote unit initially presses a push-to-talk button, a PTT_on message is sent to a serving base station, causing a set of resources to be allocated, and when the remote unit releases the push-to-talk button, the remote unit sends a PTT_off indication to the base station the resources remain dedicated to the remote unit for some period of time (hang time, e.g., 12 seconds), and during the time when the user is not depressing the push-to-talk button, the base station transceiver subsystems send idle frames to preserve the link power control, and when the remote unit user subsequently depresses the push-to-talk button, the link is completely established and immediately responsive, and a hang timer is used to detect the end of a call, and when no remote user depresses the push-to talk button before the hang timer expires, the infrastructure considers the call terminated, and releases the resources, and during the time when a user is not depressing a push-to-talk button, base station transceiver subsystems send idle frames to preserve the link power control, and at time t_1 User 1 (FIG. 3) ceases talking, and at time t_2, User 2 (FIG. 3) begins talking (communicating in a cellular communications network through a dedicated channel comprising both an uplink and a plurality of downlinks; controlling a flow of data packets by at least one of a server function and a server in a core network;

keeping up the dedicated channel responsive to a last speech sample packet sent downlink from the core network by sending post-speech packets for a time of such duration that a new uplink can be established utilizing at least one downlink from the core network; and transmitting the post-speech packets to the plurality of downlinks after receiving a packet indicating an end of speech sample from the uplink, and wherein post-speech packets are also sent to a terminal that used the uplink).

Dorenbosch fails to teach one post-speech packet of the post-speech packets includes information intended for a user of a receiving terminal connected to the dedicated channel.

Kuita teaches in the abstract, and in paragraphs [0044] and [0047], and in FIGS. 1-3, 4A and 4B, both a bearer's directory number and mail address are automatically transmitted to an other party during a pause period, and FIG. 3 is an illustration of a personal data sequence, and a voice data sequence is located in a traffic channel (TCH) field during talking, and if a pause period is detected by a voice detector 15 (FIG. 1), no voice data sequence is present as the transmission data sequence so as to be located in the traffic channel (TCH) field (FIGS. 4A and 4B), and under the circumstances, the transmission data selection unit 25 (FIG. 2) of the controller 13 is operated by the processing unit 26 to arrange the personal data sequence (FIG. 3) in the form of a fast associated control channel (FACCH) field (FIGS. 4A and 4B) of 112 bits, and this shows the traffic channel (TCH) field of 112 bits is replaced by the FACCH field (one post-speech packet of the post-speech packets includes information intended for a user of a receiving terminal connected to the dedicated channel).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Kuita in the teachings of Dorenbosch since Kuita provides a system where personal data can be shared among handsets during pauses in speech, which can be introduced into the system of Dorenbosch to allow the sharing of contact information over a voice channel that does not congest or interfere with the operation of the voice channel and does not require the use of an additional channel.

In regard to Claim 25, Dorenbosch teaches in paragraphs [0023], [0028] and [0029], and in FIGS 1 and 3, during the time when a user is not depressing a push-to-talk button, base station transceiver subsystems send idle frames to preserve the link power control, and at time t_1 User 1 (FIG. 3) ceases talking, and at time t_2, User 2 (FIG. 3) begins talking (determining when the last speech sample packet is sent; sending the at least one post-speech packet downlink to receiving terminals; determining whether the receiving terminal taking part in session needs a new uplink; and establishing said new uplink).

Claims 3, 13 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorenbosch in view of Kuita, and further in view of Crockett et al. (Pub. No.: US 2003/0153343 A1), hereafter referred to as Crockett.

In regard to Claim 3, as presented in the rejection of Claim 1, Dorenbosch in view of Kuita teaches a receiving terminal.

Dorenbosch fails to explicitly teach a receiving terminal signals the user of the terminal after receiving a last speech sample packet.

Crockett teaches in paragraph [0156], and in FIG. 12, a user B (FIG. 12) has control of the floor, i.e. user B is speaking, when user A requests permission to talk by pressing 1202 (FIG. 12) the PTT button, and the client may send 1204 (FIG. 12) a message to the MCU requesting permission to talk, and the MCU may perform talker arbitration 1206 (FIG. 12) and determine that user B may be preempted and user A granted the floor, and in order to ensure a break in media flow, i.e. user B may stop talking before user A's media is transmitted, the MCU first sends 1208 (FIG. 12) a message to the client for user B, indicating the floor has been preempted by another user, and then send 1210 (FIG. 12) a response granting the floor to user A (a receiving terminal signals the user of the terminal after receiving a last speech sample packet).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Crockett in the teachings of Dorenbosch in view of Kuita since Crockett provides a system where a network device provides arbitration to users for efficiently utilizing limited voice channel capacity, and provides a system where a client device signals the user whether or not the voice channel is available to the user as a result of the arbitration.

In regard to Claim 13, as presented in the rejection of Claim 12, Dorenbosch in view of Kuita teaches an apparatus.

Dorenbosch fails to explicitly teach causing the apparatus to perform signaling after receiving a last speech sample packet.

Crockett teaches in paragraph [0156], and in FIG. 12, a user B (FIG. 12) has control of the floor, i.e. user B is speaking, when user A requests permission to talk by pressing 1202 (FIG. 12) the PTT button, and the client may send 1204 (FIG. 12) a message to the MCU requesting permission to talk, and the MCU may perform talker arbitration 1206 (FIG. 12) and determine that user B may be preempted and user A granted the floor, and in order to ensure a break in media flow, i.e. user B may stop talking before user A's media is transmitted, the MCU first sends 1208 (FIG. 12) a message to the client for user B, indicating the floor has been preempted by another user, and then send 1210 (FIG. 12) a response granting the floor to user A (cause the apparatus to perform signaling after receiving a last speech sample packet).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Crockett in the teachings of Dorenbosch in view of Kuita since Crockett provides a system where a network device provides arbitration to users for efficiently utilizing limited voice channel capacity, and provides a system where a client device signals the user whether or not the voice channel is available to the user as a result of the arbitration.

In regard to Claim 26, as presented in the rejection of Claim 125, Dorenbosch in view of Kuita teaches a receiving terminal.

Dorenbosch fails to explicitly teach a receiving terminal signals a user of the terminal after receiving the last speech sample packet.

Crockett teaches in paragraph [0156], and in FIG. 12, a user B (FIG. 12) has control of the floor, i.e. user B is speaking, when user A requests permission to talk by pressing 1202 (FIG. 12) the PTT button, and the client may send 1204 (FIG. 12) a message to the MCU requesting permission to talk, and the MCU may perform talker arbitration 1206 (FIG. 12) and determine that user B may be preempted and user A granted the floor, and in order to ensure a break in media flow, i.e. user B may stop talking before user A's media is transmitted, the MCU first sends 1208 (FIG. 12) a message to the client for user B, indicating the floor has been preempted by another user, and then send 1210 (FIG. 12) a response granting the floor to user A (a receiving terminal signals a user of the terminal after receiving the last speech sample packet).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Crockett in the teachings of Dorenbosch in view of Kuita since Crockett provides a system where a network device provides arbitration to users for efficiently utilizing limited voice channel capacity, and provides a system where a client device signals the user whether or not the voice channel is available to the user as a result of the arbitration.

Claims 4, 5, 10, 19, 20, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorenbosch in view of Kuita, and further in view of Davidson (Patent No.: US 6,577,862 B1), hereafter referred to as Davidson.

In regard to Claim 4, as discussed in the rejection of Claim 1, Dorenbosch in view of Kuita teaches post speech packets.

Dorenbosch fails to teach post-speech packets are sent downlink 5 to 10 times at intervals of 500 ms at most.

Davidson teaches in column 9, lines 14-18, GSM will produce a network SID for every 480 ms of continuous silence (post-speech packets are sent downlink 5 to 10 times at intervals of 500 ms at most).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Davidson in the teachings of Dorenbosch in view of Kuita since Davidson provides a cellular system in which the method of Dorenbosch in view of Kuita may be utilized within, and Davidson provides a method in which SID messages may be utilized for transmitting comfort noise across a network and that has reduced processing requirements, which can be introduced into the system of Dorenbosch in view of Kuita to allow reduced processing requirements for communicating comfort noise in the system of Dorenbosch in view of Kuita.

In regard to Claim 5, Dorenbosch teaches in paragraph [0024], a hang timer is used to detect the end of a call, and when no remote user depresses the push-to talk button before the hang timer expires, the infrastructure considers the call terminated, and releases the resources (after a last post-speech packet the downlink used is released after a delay specific to a cellular network).

In regard to Claim 10, as discussed in the rejection of Claim 1, Dorenbosch in view of Kuita teaches post speech packets.

Dorenbosch fails to teach sending 5 to 10 post-speech packets at intervals of 500 ms at most.

Davidson teaches in column 9, lines 14-18, GSM will produce a network SID for every 480 ms of continuous silence (send 5 to 10 post-speech packets at intervals of 500 ms at most).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Davidson in the teachings of Dorenbosch in view of Kuita since Davidson provides a cellular system in which the method of Dorenbosch in view of Kuita may be utilized within, and Davidson provides a method in which SID messages may be utilized for transmitting comfort noise across a network and that has reduced processing requirements, which can be introduced into the system of Dorenbosch in view of Kuita to allow reduced processing requirements for communicating comfort noise in the system of Dorenbosch in view of Kuita.

In regard to Claim 19, as discussed in the rejection of Claim 15, Dorenbosch in view of Kuita teaches post speech packets.

Dorenbosch fails to teach an element for sending post-speech packets is a terminal ending its transmission.

Davidson teaches in column 5, lines 14-65, and in column 6, lines 42-54, and in column 6, line 55 to column 7, line 40, and in column 8, lines 49-59, and in column 9,

lines 5-23, and in FIGS. 2-4, unidirectional voice transmissions, and a mobile phone 210 (FIG. 2) communicates across communications channel 212 (FIG. 2) by sending or receiving data units in time slots via an antenna 214 (FIG. 2) which is coupled to base station (BS) 220 (FIG. 2), a BS, along with a transmission control node (TCN) (which will be a Base Station Controller (BSC) in GSM) are known as a Base Station Subsystem (BSS) 220 (FIG. 2), and in a receive silence step 310 (FIG. 3), a BSS 200 (FIG. 2) receives from an uplink communication channel a SID frame (an element for sending post-speech packets is a terminal ending its transmission), and a network SID is somewhat analogous to a SID in the uplink communication channel, a network SID contains the information needed by the destination TCN for the destination TCN to produce comfort noise, and in the send SID step 340 (FIG. 3), the network SID algorithm 300 (FIG. 3) builds a SID packet or a SID cell, and sends it across the core transport network 250 (FIG. 2), and in GSM, will produce a network SID for every 480 ms of continuous silence, and a network SID will be received in a receive network SID step 450 (FIG. 4), and upon receiving the network SID, the comfort noise algorithm will produce comfort noise depending on the type of network SID message received, thus, the comfort noise algorithm 400 (FIG. 4) detects the network SID type in a network SID type query 460 (FIG. 4), then, for example, if the network SID is a control command, then the comfort noise algorithm 400 will produce a predefined comfort noise in a generate comfort noise step 470 (FIG. 4) (an element for sending post-speech packets is a terminal ending its transmission).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Davidson in the teachings of Dorenbosch in view of Kuita since Davidson provides a cellular system in which the method of Dorenbosch in view of Kuita may be utilized within, and Davidson provides a method in which SID messages may be utilized for transmitting comfort noise across a network and that has reduced processing requirements, which can be introduced into the system of Dorenbosch in view of Kuita to allow reduced processing requirements for communicating comfort noise in the system of Dorenbosch in view of Kuita.

In regard to Claim 20, as discussed in the rejection of Claim 15, Dorenbosch in view of Kuita teaches post speech packets.

Dorenbosch fails to teach post-speech packets are sent downlink 5 to 10 times at intervals of 500 ms at most.

Davidson teaches in column 9, lines 14-18, GSM will produce a network SID for every 480 ms of continuous silence (post-speech packets are sent downlink 5 to 10 times at intervals of 500 ms at most).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Davidson in the teachings of Dorenbosch in view of Kuita since Davidson provides a cellular system in which the method of Dorenbosch in view of Kuita may be utilized within, and Davidson provides a method in which SID messages may be utilized for transmitting comfort noise across a network and that has reduced processing requirements, which can be introduced into the system of

Dorenbosch in view of Kuita to allow reduced processing requirements for communicating comfort noise in the system of Dorenbosch in view of Kuita.

In regard to Claim 27, as discussed in the rejection of Claim 24, Dorenbosch in view of Kuita teaches post speech packets.

Dorenbosch fails to teach post-speech packets are sent downlink 5 to 10 times at intervals of 500 ms at most.

Davidson teaches in column 9, lines 14-18, GSM will produce a network SID for every 480 ms of continuous silence (post-speech packets are sent downlink 5 to 10 times at intervals of 500 ms at most).

It would have been obvious to one of ordinary skill in the art at the time of the invention to introduce the teachings of Davidson in the teachings of Dorenbosch in view of Kuita since Davidson provides a cellular system in which the method of Dorenbosch in view of Kuita may be utilized within, and Davidson provides a method in which SID messages may be utilized for transmitting comfort noise across a network and that has reduced processing requirements, which can be introduced into the system of Dorenbosch in view of Kuita to allow reduced processing requirements for communicating comfort noise in the system of Dorenbosch in view of Kuita.

In regard to Claim 28, Dorenbosch teaches in paragraph [0024], a hang timer is used to detect the end of a call, and when no remote user depresses the push-to talk button before the hang timer expires, the infrastructure considers the call terminated,

and releases the resources (after a last post-speech packet the downlink used is released after a delay specific to a cellular network).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dorenbosch in view of Kuita, and further in view of Kajizaki et al. (Pub. No.: US 2001/0055317 A1), hereafter referred to as Kajizaki.

In regard to Claim 14, as discussed in the rejection of Claim 12, Dorenbosch in view of Kuita teaches post-speech packets.

Dorenbosch fails to teach appending packets together.

Kajizaki teaches in the abstract, when a routing processing unit detects the transmission of a number of packets addressed to the same destination a combining unit assembles a combined packet (where the received post-speech packets are appended to speech sample packets).

It would have been obvious to one skilled in the art at the time of the invention to adopt the packet combining of Kajizaki into the real time data network of Dorenbosch in view of Kuita since packets below a certain size can result in unacceptable overhead and inefficient link performance.

Allowable Subject Matter

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 30 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

I. Arguments for Claim Rejections under 35 USC § 101.

Applicant's arguments, see pages 9-10, filed 08/27/2010, with respect to the Claim Rejections under 35 USC § 101 have been fully considered and are persuasive. The Claim Rejections under 35 USC § 101 have been withdrawn.

II. Arguments for Claim Rejections under 35 USC § 103.

Applicant's arguments with respect to claims 1-5, 8-10, 12-20, 22 and 24-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jagadeesan et al. (Pub. No.: US 2002/0118650 A1), paragraph [0048], FIG. 3.

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA SMITH whose telephone number is 571-270-1826. The examiner can normally be reached on Monday-Friday, 10:30am-7pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chirag Shah can be reached on 571-272-3144. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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